English-US

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Technical Data Sheet

3M™ Scotch-Weld™ Pipe Sealant Anaerobic Adhesive PS67

Product Details

Regulatory Info/SDS

Product Description

3M™ Scotch-Weld™ Pipe Sealant Anaerobic Adhesives are one-component anaerobic sealants that cure and seal hydraulic and pneumatic pipes and fittings to withstand high temperatures and pressures

Product Features

3M™ Scotch-Weld™ Stainless Steel High Temperature Pipe Sealant PS67 is a fast cure, low breakaway torque strength, high temperature paste pipe sealant for metal connections in applications such as pressure vessels, air compressors, hydraulic, and pneumatic systems. It works on inactive surfaces (such as stainless steel) and provides an almost instant low pressure seal. A high pressure seal results when the bond is fully cured.

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Uncured Physical Properties

Attribute Name	Test Method	Value
Color		Off-White [1]
Chemistry		Dimethacrylate
Viscosity		150,000-400,000 cP [2]
Fixture Time	ISO 10964	25min (avg time) (<15-30 min range)

[1] Colors may vary from nearly white to yellow/amber. Adhesive performance is not affected by color variation.

[2] Brookfield Viscometer spindle T-E at 2.5 rpm

Typical Mixed Physical Properties

Temperature: 23 °C (73 °F)

Attribute Name	Value
Time to Full Cure	24 h [1]

[1] The cure time is defined as that time required for the adhesive to achieve a minimum of 80% of the ultimate strength as measured by aluminum-aluminum OLS.

Typical Physical Properties

Attribute Name	Value
Cured Color	White
Appearance	Paste

Typical Cured Characteristics

Attribute Name	Test Condition	Value
Temperature Range	Continuous	-54 — 204 °C
Max Pipe Diameter		3 in

Typical Performance Characteristics

Attribute Name	Test Method	Value
Breakaway Torque	ISO 10964	40in-lb - typical value (20 - 45in-lb range)
Prevailing Torque		30in-lb - typical value (12 - 40in-lb range) [1]
Long Term Temperature Resistance		204 °C (400 °F) [2]
Minimum Long Term Temperature Resistance		-54 °C (-65 °F) [2]

[1] Reference ISO 10964. To convert to (N.m) divide (in.lb) by 8.851.

[2] Long Term (day, weeks)

Handling/Application Information

Directions for Use

3MTM Scotch-Weld™ Pipe Sealant Anaerobic Adhesives are not recommended for use on most plastics due to potential cracking of plastic parts. Also, they are not recommended for use in piping systems that contain pure oxygen or an oxygen-rich environment, chlorine, or strong oxidizing substances.

For Assembly:
1. Ensure parts are clean, dry and free from oil, grease and dirt. For best results, clean and dry parts with solvent or 3MTM Scotch-Weld™ Activator. (Activator can also be used on inactive surfaces or to accelerate the cure on active surfaces.) Note: Use of 3MTM Scotch-Weld™ Activator may reduce bond strength depending on substrates and gap. Testing is recommended to evaluate the effect.

2. If not sure of surface type, always use activator. Refer to Material surface Activity and Cure Speed section for more information.

3. Apply sealant onto the second and third threads (not the first thread) of the male fitting so as to avoid introducing uncured sealant into the system. (However, should uncured sealant get into the piping system, it will not cure or cause blockage and can be slushed out.) Avoid touching the metal surfaces with the bottle tip since the metal ions may react with the adhesive upon contact and eventually may clog the bottle tip.

4. Spread adhesive evenly around the male fitting.

For Assembly:
5. Assemble parts and tighten as required.
6. Allow assemblies to set for sufficient time so that handling strength or full cure will occur before further processing or testing.

For Disassembly:
1. Loosen or remove with regular hand tools.
2. If hand tools do not work due to the assembled parts being well tightened, apply localized heat (approximately 490oF / 254oC) to the nut or bolt and disassemble while parts are still hot. Use extreme caution when working with heat sources (e.g. heat gun, flames, etc.)

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) in the original, unopened packaging, out of direct sunlight. For best performance, use this product within 18 months from date of manufacture.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577

Automotive Disclaimer

Select Automotive Applications:
This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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